North American Seasonal Fire Assessment and Outlook

National Interagency Fire Center ● Natural Resources Canada ● Servicio Meteorológico Nacional **United States** Canada Mexico

Outlook Period December 2015 and January 2016 Issued on 10 December 2015

Executive Summary

Despite a mild start to the Canadian winter, the potential for additional wildland fire across Canada in December is very low. In the United States, much above normal temperatures in the eastern half of the county was not enough to overcome the very wet conditions across the Plains and the Southeast. Seasonal conditions in the West typically do not support much wildfire. Some fire is possible in dry, windy conditions but these are usually of short duration. Ongoing wet conditions across the Gulf and southern and middle Atlantic states will lower winter burning potential, as well as across Puerto Rico. In Mexico, fire potential remains elevated across parts of the southern states and the Yucatan peninsula.

January shows little change as Canada and most of the United States are in winter and typically have little potential for significant wildfire activity. The southeastern U.S. will continue to see wet weather that will reduce the potential for winter wildfires. Except for small areas of elevated potential in the southern states, Mexico will have normal fire potential for the month.





Monthly fire outlook for North America for December 2015 (left) and January 2016 (right). Red shading indicates areas where conditions would favor increased fire activity. Green shading indicates areas where conditions would favor decreased fire activity.









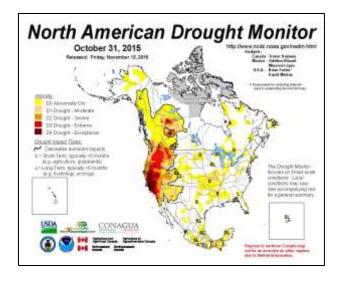
Critical Factors

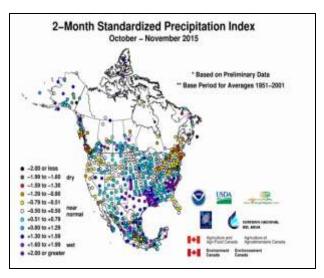
The critical factors influencing significant fire potential for this outlook period are:

El Niño-Southern Oscillation: El Niño conditions (warming of the equatorial Pacific Ocean) are at or near the forecast peak heading into the Northern Hemisphere winter season. Canada and most of the United States are typically out of fire season as winter weather conditions take hold. The southeastern U.S., including Puerto Rico, still has potential for fire into the early winter but very wet conditions associated El Niño conditions have left the region very wet, decreasing wildland fire activity. The same impact from El Niño is occurring in Mexico. Very wet November conditions across much of northern and central Mexico associated with two tropical systems (Rick and Sandra) and increasing frontal incursions have greatly reduced wildfire activity.

Drought: The North American Drought Monitor from 31 October 2015 (top right) shows severe to exceptional drought over most of the western U.S. with the worst conditions in California, Oregon, Washington, Nevada, western and northern Idaho, western Montana, and western Utah. Recent heavy rains in the Pacific Northwest have mitigated some of the western drought, especially in western Oregon, Washington and along the southwestern Canadian coast. Heavy November rain in the central and southeastern U.S. has all but completely eliminated drought from the region. Small pockets of severe drought remain in southern Mexico.

Fire Season Status: Winter months are generally characterized by very little wildfire activity across Canada, most of the United States and much of northern and central Mexico. Warm weather in November across the central and eastern U.S. and extending into central and eastern Canada was offset by near to above normal precipitation. In





Top: North American Drought Monitor from 31 October 2015. **Bottom:** 2-month Standardized Precipitation Index for October-November 2015. (Both *from U.S National Centers for Environmental Information, NCEI/NOAA)*

Mexico, two tropical systems brought significant rainfall to northern and central Mexico while the southern states remained mostly dry. Frontal intrusions pushing well into Mexico also kept wet conditions in the southeastern states. Only a few fires were observed in Mexico by the end of November, mainly human-caused and of small size and duration

Canada Discussion

December 2015 and January 2016: Winter conditions are in place throughout Canada. Western Canada is expected to receive above average temperatures and below normal snow amounts as El Niño conditions persist through the winter. This will contribute to an early start to the 2016 fire season. Eastern Canada may similarly experience a warmer winter due to El Niño though precipitation should be sufficient to recharge the moisture levels in the forest floor.

United States Discussion

December 2015 and January 2016: Most of the western and northern states are in winter and generally considered out of fire season. Some short duration fires are always possible during the dry and windy periods in cured grasses but are usually of short duration. The southeastern and central U.S. received much above normal precipitation in November, reducing potential for winter wildfires. Puerto Rico has also experienced wet conditions that reduced the potential for wildland fire activity.

Mexico Discussion

December 2015: Strong El Niño conditions will allow more and stronger cold fronts to push well into Mexico, keeping the potential for cooler and wetter conditions high across northern Mexico. The effect of heavy rains in November across much of northern and central Mexico will outweigh a drier tendency in December, keeping fire potential near normal for the month. There will also be a decrease fire activity across much of the southern states except for central Campeche and Quintana Roo, eastern Tabasco, and central Chiapas to southeastern Oaxaca where above normal potential remains.

January 2016: Cooler conditions with normal to near normal precipitation across most of the country should keep the wildfire potential normal. As the dry season approaches by the end of the month, the southern states could see an increase in fire activity, especially in southern portions of Chiapas and Oaxaca and across the central Yucatan Peninsula.

Additional Information

Additional and supplemental information for this outlook can be obtained at:

United States:

National Significant Wildland Fire Potential Outlook http://www.predictiveservices.nifc.gov/outlooks/monthly_seasonal_outlook.pdf

Canada:

Canadian Wildland Fire Information System http://cwfis.cfs.nrcan.gc.ca/home

Mexico:

Servicio Meteorológico Nacional

http://smn.cna.gob.mx/index.php?option=com_content&view=article&id=156&Itemid=113

Outlook Objective

The North American Seasonal Fire Assessment and Outlook is a general discussion of conditions that will affect the occurrence of wildland fires across Canada, the United States, and Mexico. Wildland fire is a natural part of many ecosystems across North America. This document provides a broad assessment of those factors that will contribute to an increase or decrease of seasonal fire activity. The objective is to assist wildland fire managers prepare for the potential variations in a typical fire season. It is not intended as a prediction of where and when wildland fires will occur nor is it intended to suggest any area is safe from the hazards of wildfire.

Acknowledgements

Contributions to this document were made by:

Canada: Kerry Anderson, Natural Resources Canada

Richard Carr, Natural Resources Canada

United States: Ed Delgado, Predictive Services, Bureau of Land Management

Jeremy Sullens, Predictive Services, USDA Forest Service Coleen Haskell, Predictive Services, USDA Forest Service

Mexico: Hector Robles, Servicio Meteorológico Nacional

Juan Carlos Ramos, Servicio Meteorológico Nacional Yesenia Alejandro, Servicio Meteorológico Nacional Angel Teran, Servicio Meteorológico Nacional Dario Rodriguez, Servicio Meteorológico Nacional